REMOTE SENSING
TECHNOLOGY FOR TRANSPORTATION

GIS-T CONFERENCE

April 8-12, 2001

Washington, D.C.

David S. Ekern, P.E. – Assistant Commissioner
Minnesota Department of Transportation

CONFERENCE
REMOTE SENSING & SPATIAL INFORMATION TECHNOLOGY FOR TRANSPORTATION

- December 3-5, 2000
  - National Academy of Sciences Washington, D.C.
- Sponsors:
  - National Aeronautics and Space Administration
  - Research and Special Programs Administration - USDOT
  - AASHTO
  - National States Geographic Information Council
- Organized By:
  - Transportation Research Board

PARTICIPANTS/PROGRAM

- PARTICIPANTS
  - 4 University Consortia
  - 200 Professionals and Managers
    - State DOTs
    - MPOs
    - Academia
    - Private Sector Consultants and Contractors
- PROGRAM
  - Educational Workshop
  - Presentations
  - Breakout Sessions

GOALS

- Facilitate Interaction Between Professionals in Transportation and Remote Sensing.
- Enhance the Understanding of Remote Sensing.
- Provide Feedback on Current Research Projects.
- Identify Future Research Needs.

WORKSHOP THEMES FOR FUTURE DIRECTION

1. Closing the Knowledge Gap
2. Enhancing Ongoing Communication
3. Expanding Workforce Development/Training
4. Enhancing Technology Transfer
5. Developing Standards
6. Encouraging Innovative Partnerships
7. Defining Specific Research Needs
8. Promoting Innovative Thinking

WHAT'S NEXT

- Workshops – sponsored by Consortia.
- Development of a Strategic Plan

- 2001 REMOTE SENSING CONFERENCE
  - DECEMBER 10 – 12, 2001
  - WASHINGTON, DC

CLOSING THE KNOWLEGDE GAP

- Remote Sensing Experts Need to Understand Public Transportation Agencies.
- Transportation Agencies Need to Become Knowledgeable of Remote Sensing Products.
- Encouraging Regular Meetings with Consortia.
- Developing Synthesis on Remote Sensing.
- Holding Regular Conferences.

ENHANCING ONGOING COMMUNICATION

- Need for Continuing Dialogue.
- Expand the Methods and Mediums.

EXPANDING WORKFORCE AND TRAINING

- Lack of Skilled Professionals.
- Recognition of Private Sector as Major Source of Skills and Staff.
- Holding More Workshops/Training Programs.
- Programs Targeted to Attract New Professionals.
- Focus on the Educational Community.

ENHANCING TECHNOLOGY TRANSFER

- Move Research to Deployment Faster.
- Showcasing Technology.
- Focusing Research Results at Users.
- Focus at a Few Key Products or Services.

DEVELOPING STANDARDS

- Basic Information on Availability, Accuracy, Cost.
- Specific Accuracy Requirements for Individual Applications.
- Specific Standards Needed to Assure Customer of Product/Service Reliability.

DEFINING SPECIFIC REASEARCH NEEDS

- Cost/Benefit Assessment Methodology.
- Metrics and Measuring Tools.
- Use in Modes Beyond Highways.
- Regional Study Application.
- Database Development and Maintenance.
- Longer term Use in Measuring and Monitoring Transportation and the Environment.

PROMOTING INNOVATIVE THINKING

- Introduction of Remote Sensing will not Happen Overnight.
- Need to for Both Public and Private Sectors to be Innovative and Creative in Applications.
- Nontraditional Thinking Needs to Dominate the Approaches Employed.